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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,708	02/10/2004	Sik-Leung Chan	CHU/284/US	3855

2543 7590 06/07/2006  
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EXAMINER

GABLER, PHILIP FRANCIS

ART UNIT PAPER NUMBER

3637

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/775,708	Applicant(s) CHAN, SIK-LEUNG	
	Examiner Philip Gabler	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7-9 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 8, 9 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

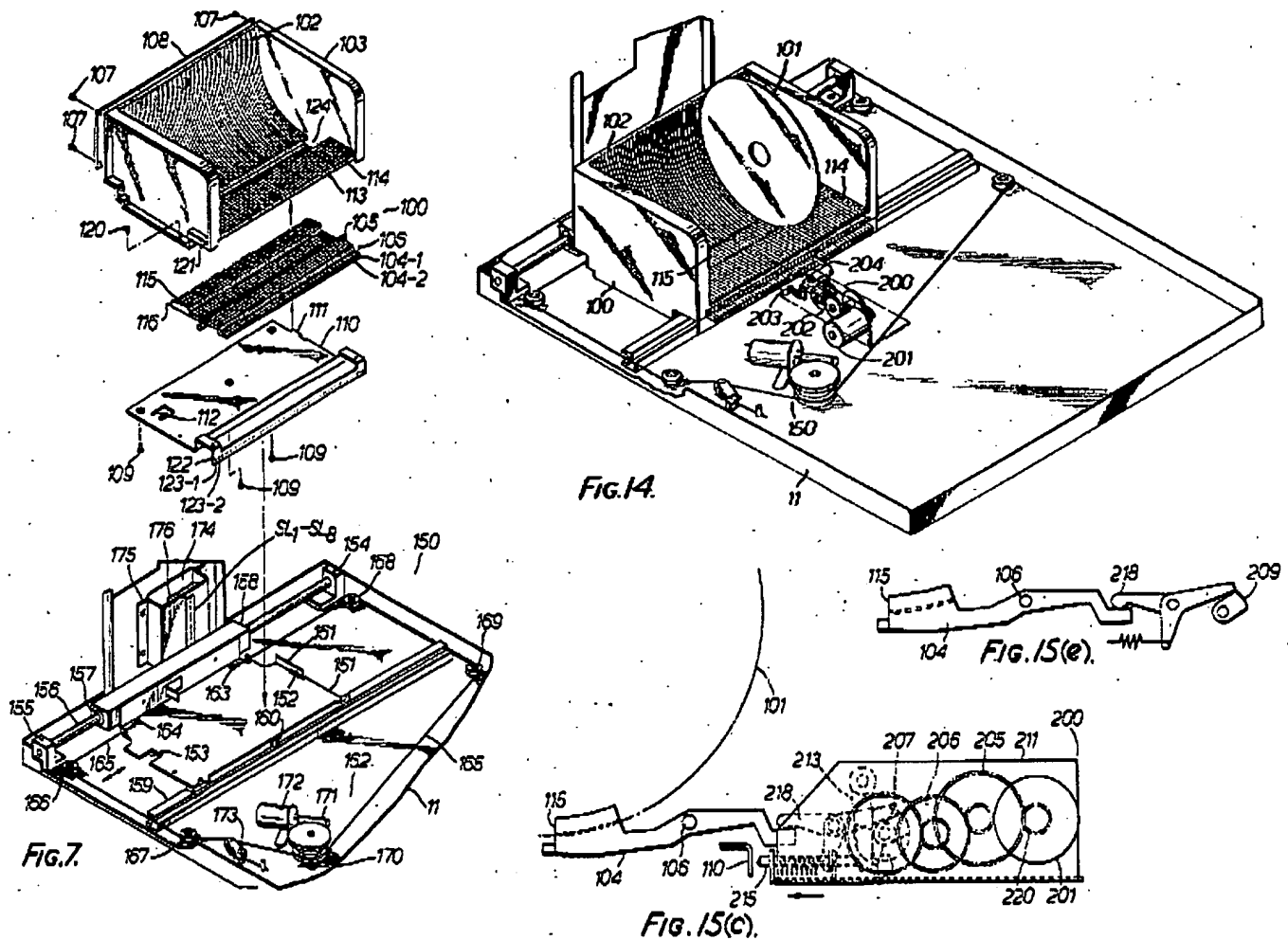
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami (US Patent Number 4695990). Kawakami (Figures 7, 14, 15c, and 15e) discloses a disc storage unit comprising a case (11, etc.), a tray (103) supported by the case and configured to support an array of discs in respective parallel substantially vertical planes across which respective coaxial axes of the discs pass substantially horizontally, a disc-raising mechanism (106) comprising a plurality of fingers (forming sides of grooves 115) activatable to lift one of the discs from the tray within its respective plane to thereby render the disc non-coaxial with other discs that might be supported by the tray, a pivot bar (actuation, motor side of an arm 104) having a slidably mounted carriage beam (disc side of an arm 104, slidable relative to other arms if not shaft 105) from which said fingers extend and a crank arm (arm at end of pivot bar for mating with 218); an indexing mechanism (150) configured to cause the disc-raising mechanism to raise others of said discs in a like manner; an electric motor (201) for pivoting the pivot bar; and a gearbox (205, 206, etc.) that reduces output speed of the electric motor (see for example column 6 lines 63-64) and drives the pivot bar, wherein the gearbox comprises

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an output gear (209) having an eccentric pin to which a link (218) is attached wherein said link is attached to said crank arm.



Kawakami '990 Figure 7, 14, 15c, and 15e

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

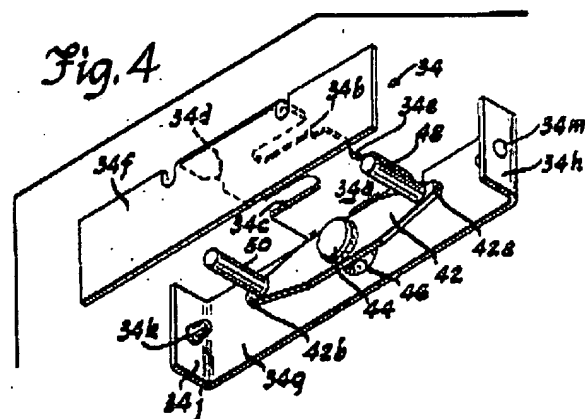
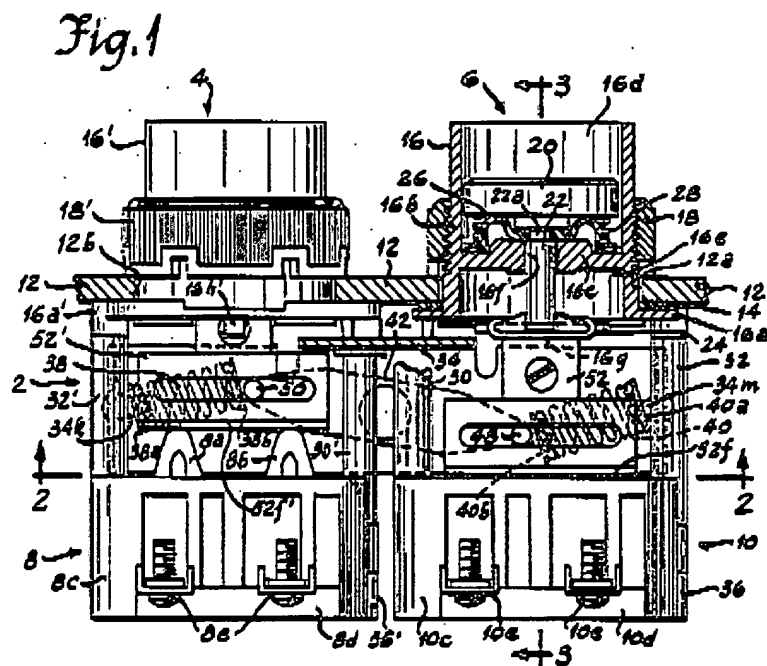
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami in view of Keranen (US Patent Number 4177363). Kawakami discloses a disc storage unit comprising a case (11, etc.), a tray (103) supported by the case and configured to support an array of discs in respective parallel substantially vertical planes across which respective coaxial axes of the discs pass substantially horizontally, a disc-raising mechanism (106) comprising a plurality of fingers (forming sides of grooves 115) activatable to lift one of the discs from the tray within its respective plane to thereby render the disc non-coaxial with other discs that might be supported by the tray, a pivot bar (actuation, motor side of an arm 104) having a slidably mounted carriage beam (disc side of an arm 104, slidable relative to other arms if not shaft 105) from which said fingers extend; an indexing mechanism (150) configured to cause the disc-raising mechanism to raise others of said discs in a like manner; and an electric motor (201) for pivoting the pivot bar; but does not disclose an assembly of interconnected switches. Keranen (Figures 1 and 4) discloses a switch mechanism having two momentary switches (8, 10), a slide switch (52') and two push buttons (4, 6), one of the momentary switches activatable by one of the pushbuttons and the other momentary switch being activatable by the other pushbutton, the slide switch being activatable by both

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pushbuttons, and a pair of pivotable elbows (42a, 48; and 42b, 50), each elbow having one arm (42a and 42b) co-operating with one of the pushbuttons and one of the momentary switches and another arm (48 and 50) co-operating with the slide switch.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a switch assembly as taught by Keranen in Kawakami's storage unit because of the additional motor control this could provide.



Keranen '363 Figures 1 and 4

### Allowable Subject Matter

5. Claims 8, 9, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments, see first page of remarks, filed 28 April 2006, with respect to the objection to the specification and the 35 USC 112 rejection of claims 8, 9, and 15 have been fully considered and are persuasive. The objection to the specification and 35 USC 112 rejection of the above claims have been withdrawn.

7. The remainder of Applicant's arguments with respect to claims 7-9 and 13-15 have been considered but are moot in view of the new grounds of rejection based on newly found art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Gabler whose telephone number is (571) 272-6038. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFG   
5/26/2006



JAMES O. HANSEN  
PRIMARY EXAMINER